

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 November 2001 (22.11.2001)

PCT

(10) International Publication Number
WO 01/87360 A3

(51) International Patent Classification⁷: **C08B 37/16**,
A61L 9/01, C11D 3/22, D06M 15/03, C08L 5/16

(21) International Application Number: **PCT/US01/15202**

(22) International Filing Date: **10 May 2001 (10.05.2001)**

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:
60/204,164 **15 May 2000 (15.05.2000) US**

(71) Applicant: **THE PROCTER & GAMBLE COMPANY**
[US/US]; One Procter & Gamble Plaza, Cincinnati, OH
45202 (US).

(72) Inventors: **WOO, Ricky, Ah-Man**; 6940 Van Gordon Road, Hamilton, OH 45011 (US). **UCHIYAMA, Hirotaka**; 9622 Stonemasters Drive, Cincinnati, OH 45140 (US). **REECE, Steven**; 4130 Jennifer Drive, West Chester, OH 45013 (US). **DU VAL, Dean, Larry**; 365 Chadwick Court, Lebanon, OH 45036 (US). **SCHAEFFER, Heather, Ann**; 212 Whirlaway Terrace, Loveland, OH 45140 (US).

(74) Agents: **REED, T., David et al.**; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
4 April 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 01/87360 A3

(54) Title: **COMPOSITIONS COMPRISING CYCLODEXTRIN DERIVATIVES**

(57) Abstract: A stable composition for removing unwanted molecules from a surface comprises low-degree of substitution cyclodextrin derivatives. The compositions are suitable for capturing unwanted molecules from inanimate surfaces, including fabrics, including carpets, and household surfaces such as countertops, dishes, floors, garbage cans, ceilings, walls, carpet padding, air filters, and the like, and from animate surfaces, including skin, hair, and the like. The compositions can further comprise cyclodextrin-compatible and -incompatible materials, and other optional ingredients.

THIS PAGE BLANK (USPTO)

INT' NATIONAL SEARCH REPORT

International Application No

PCT/US 01/15202

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08B37/16 A61L9/01 C11D3/22 D06M15/03 C08L5/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08B C11D A61L D06M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 678 598 A (HIDEKAZU OGINO ET AL.) 7 July 1987 (1987-07-07) column 5, line 35 -column 6, line 64 table 2	1-16
X	PATENT ABSTRACTS OF JAPAN vol. 16, no. 110 (C-920), 18 March 1992 (1992-03-18) & JP 03 284616 A (SHISEIDO CO LTD), 16 December 1991 (1991-12-16) abstract	1-11
Y	US 5 942 217 A (RICKY AH-MAN WOO ET AL.) 24 August 1999 (1999-08-24) cited in the application see the whole document	1-11
	--- -/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *L* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

3 December 2001

Date of mailing of the international search report

13/12/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

LENSEN, H

INTF NATIONAL SEARCH REPORT

Internal Application No
PCT/US 01/15202

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 727 064 A (JOSEF PITHA) 23 February 1988 (1988-02-23) column 7, line 14 - line 20 ---	1-11
Y	US 4 638 058 A (LOTHAR BRANDT ET AL.) 20 January 1987 (1987-01-20) column 5, line 16 -column 6, line 3 ---	1-11
Y	EP 0 636 634 A (JANSSEN PHARMACEUTICA N.V.) 1 February 1995 (1995-02-01) page 2, line 51 - line 57 -----	1-11

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/15202

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4678598	A	07-07-1987	JP 1815954 C	18-01-1994
			JP 5029002 B	28-04-1993
			JP 62033112 A	13-02-1987
			AT 61934 T	15-04-1991
			DE 3678356 D1	02-05-1991
			EP 0211392 A2	25-02-1987
			ES 2000387 A6	16-02-1988
			JP 1703226 C	14-10-1992
			JP 3024443 B	03-04-1991
			JP 62149611 A	03-07-1987
JP 03284616	A	16-12-1991	JP 2857629 B2	17-02-1999
US 5942217	A	24-08-1999	AU 1711099 A	16-11-1999
			AU 1711199 A	16-11-1999
			AU 1804699 A	16-11-1999
			BR 9815835 A	26-12-2000
			BR 9815836 A	26-12-2000
			BR 9815837 A	26-12-2000
			EP 0988064 A1	29-03-2000
			EP 0988364 A1	29-03-2000
			EP 0988365 A1	29-03-2000
			TR 200003126 T2	22-01-2001
			WO 9856888 A1	17-12-1998
			WO 9856429 A1	17-12-1998
			WO 9856890 A1	17-12-1998
			WO 9955813 A1	04-11-1999
			WO 9955814 A1	04-11-1999
			WO 9955815 A1	04-11-1999
			AU 7961098 A	30-12-1998
			BR 9810426 A	05-09-2000
			CN 1269819 T	11-10-2000
			EP 1124923 A1	22-08-2001
			HU 0100360 A2	30-07-2001
			TR 200000439 T2	21-11-2000
			US 6001343 A	14-12-1999
			WO 9856889 A1	17-12-1998
US 4727064	A	23-02-1988	US 4596795 A	24-06-1986
US 4638058	A	20-01-1987	DE 3477929 D1	01-06-1989
			EP 0147685 A2	10-07-1985
			JP 1890069 C	07-12-1994
			JP 6017361 B	09-03-1994
			JP 60152502 A	10-08-1985
EP 636634	A	01-02-1995	EP 0636634 A1	01-02-1995
			AT 124055 T	15-07-1995
			AT 159954 T	15-11-1997
			AU 583599 B2	04-05-1989
			AU 5476086 A	16-10-1986
			CA 1300130 A1	05-05-1992
			CY 1918 A	07-03-1997
			DE 3650336 D1	27-07-1995
			DE 3650655 D1	11-12-1997
			DE 3650655 T2	12-03-1998
			DK 121486 A	16-09-1986
			EP 0197571 A2	15-10-1986

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/15202

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 636634	A	ES 552984 D0	16-05-1987
		ES 8705899 A1	01-08-1987
		FI 861064 A ,B,	16-09-1986
		FI 86507 B	29-05-1992
		GR 860685 A1	11-07-1986
		HK 131896 A	26-07-1996
		HU 42514 A2	28-07-1987
		HU 206381 B	28-10-1992
		IE 66673 B1	24-01-1996
		IE 80908 B1	16-06-1999
		IE 950700 L	15-09-1986
		JP 2562809 B2	11-12-1996
		JP 61275301 A	05-12-1986
		KR 9307386 B1	09-08-1993
		NO 860971 A ,B,	16-09-1986
		NZ 215350 A	29-03-1989
		PT 82186 A ,B	01-04-1986
		SG 48788 A1	18-05-1998
		US 4870060 A	26-09-1989
		US 4764604 A	16-08-1988
		ZA 8601930 A	28-10-1987